#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-016489 Address: 333 Burma Road **Date Inspected:** 29-Aug-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Li Yang. No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** OBG components.

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Mr. Shailesh Wadkar was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

**OBG Trial Assembly Yard:** 

This QA Inspector observed the following work in progress:

OBG Seg 10AE and Seg 10BE:

The Flux Cored Arc Welding (FCAW) process on weld joint no's: OBE10-001 and 005. The welders are identified as 040367 and 047353 and were observed welding in the 3G position. ZPMC Quality Control (QC) was identified as Wang Liang. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-T.

The Shielded Metal Arc Welding (SMAW) process on weld joint no's: OBE10B-004 and 005. The welders are identified as 040504 and 044515 and were observed welding in the 4G position. ZPMC QC was identified as Wang Liang. The welding variables recorded by QC appeared to comply with WPS: B-P-2214-B-U2-FCM-1.

The SMAW process on weld joint no: OBE10B-003. The welders are identified as 046960 and 040320 and were observed welding in the 4G position. ZPMC QC was identified as Wang Liang. The welding variables recorded by

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QC appeared to comply with WPS: B-P-2214-B-U2-FCM-1.

OBG Seg 10BW:

The FCAW process on weld joint no: OBE10L-005. The welder is identified as 053486 and was observed welding in the 1G position. ZPMC QC was identified as Zhong Peng. The welding variables recorded by QC appeared to comply with WPS: B-T-2231-B-U2-F.

1) OBG Seg 9CW and Seg 9DW:

Notification no: 006513.

i) For Seg 9CW and Seg 9DW hold back welds:

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC QC personnel. This QA Inspector has generated MT report for this date. The members are identified as OBG components – Seg 9CW and Seg 9DW (hold back welds). The weld designations reviewed are as follows:

- a) SP731-001-031.
- b) DP685-001-017.
- ii) For Seg 9CW and Seg 9DW splice weld:

This QA inspector performed MT of approximately 15% of an area that has been previously tested and accepted by ZPMC QC personnel. This QA Inspector has generated MT report for this date. The members are identified as OBG components - Seg 9CW and Seg 9DW (splice welds). The weld designations reviewed are as follows:

- a) OBW9A-001 and 005.
- 2) OBG Seg 9DW and Seg 9EW:

Notification no: 006514 (for I-ribs and T-ribs hold back welds).

This QA inspector performed MT of approximately 15% of an area that has been previously tested and accepted by ZPMC QC personnel. This QA Inspector has generated MT report for this date. The members are identified as OBG components - Seg 9DW and Seg 9EW (I-ribs and T-ribs hold back welds). The weld designations reviewed are as follows:

- 1) BP154-001-049 to 052.
- 2) BP155-001-031 to 034.
- 3) SP773-002-057 and 058.
- 4) SP774-001-009 and 010.
- 5) SP733-002-055 and 056.
- 6) SP734-001-007 and 008.
- 7) SP495-002-040 and 041.

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- 8) SP496-001-005 and 006.
- 9) SP673-002-063 and 064.
- 10) SP709-001-013 and 014.
- 11) EP129-002-017 and 018.
- 12) EP165-001-005 and 006.
- 13) DP647-001-015 and 016.
- 14) DP712-001-009 and 010.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

## **Summary of Conversations:**

No significant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang; phone: 15000422372., who represents the Office of Structural Materials for your project.

Inspected By:	Wadkar, Sailesh	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer